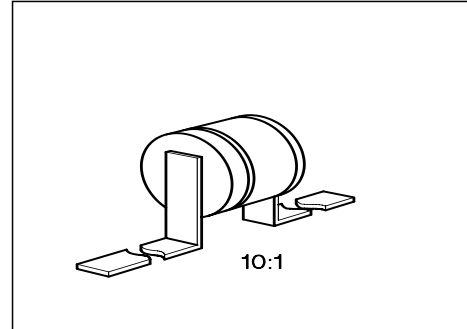


Silicon PIN Diode

BXY 44K

- Microwave attenuator diode
- Linear RF characteristic



Type	Marking	Ordering Code	Pin Configuration	Package ¹⁾
BXY 44K	–	Q62702-X148	Cathode: black dot, heat sink 	T1

Maximum Ratings

Parameter	Symbol	Values	Unit
Reverse voltage	V_R	200	V
Forward current	I_F	0.5	A
Peak forward current, $t_p = 1 \mu\text{s}$	I_{FRM}	20	
Total power dissipation	P_{tot}	600	mW
Junction temperature	T_j	175	°C
Storage temperature range	T_{stg}	– 65 ... + 150	
Operating temperature range	T_{op}	– 65 ... + 150	

¹⁾ For detailed information see chapter Package Outlines.

Electrical Characteristicsat $T_A = 25\text{ °C}$, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
Breakdown voltage $I_R = 10\ \mu\text{A}$	$V_{(BR)}$	200	–	–	V
Forward voltage $I_R = 100\ \text{mA}$	V_F	–	–	1	
Reverse current $V_R = 100\ \text{V}$	I_R	–	–	10	nA
Storage time $I_F = 10\ \text{mA}$, $V_R = 10\ \text{V}$	t_s	–	50	–	ns
Diode capacitance $V_R = 50\ \text{V}$, $f = 1\ \text{MHz}$	C_T	–	–	0.4	pF
Case capacitance	C_C	–	0.1	–	
Charge carrier life time $I_F = 10\ \text{mA}$, $I_R = 6\ \text{mA}$	τ_L	–	0.5	–	μs
Forward resistance $f = 100\ \text{MHz}$, $I_F = 10\ \mu\text{A}$ $f = 100\ \text{MHz}$, $I_F = 1\ \text{mA}$ $f = 100\ \text{MHz}$, $I_F = 10\ \text{mA}$	r_f	–	1000 25 3.5	–	Ω